

BW Source System: Troubleshooting Guide

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This article is extension of SAP note 1478123 and 886102 with screen shots.

Systems which provide BI with data are described as source systems.

- SAP Systems
- BI Systems
- Flat files for which metadata is maintained manually and transferred to BW using a file interface
- Database management systems into which data is loaded from a database supported by SAP using DB Relational or multidimensional sources that are connected to BI using UD Connect
- Web Services that transfer data to BI by means of a push
- Non-SAP systems for which data and metadata is transferred using staging BAPIs.

Troubleshooting:

Check whether source system connection is OK

- RSA1 => Select the context menu of relevant source system => select check.
You should get message as below,

“Source system connection <LOGSYS > ok.”

- If you get below error while you execute RSA1

“You can work only on client XXX”

Check in Table: RSADMINA – bwmandt

The client should have been maintained here.

- To check consistency in Backend Tables and Transactions, You can get details for right BW source system connection with following procedures:

➔ **SCC4**

You can get details on clients assigned to which logical system
Here you can decide whether changes are allowed or not
e.g. Production system access.

➔ **Determine the logical system name of BW and SAP source system**

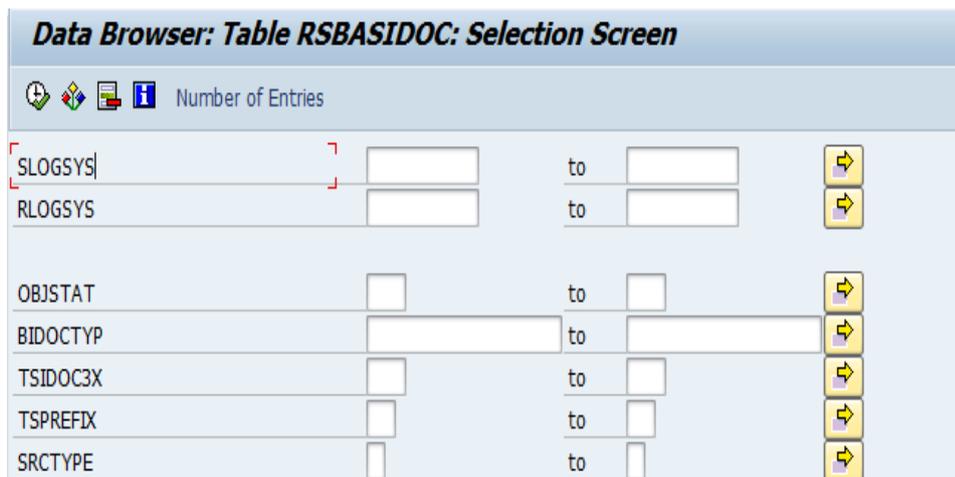
SE16 =>T000 => Field (LOGSYS) of the client you are checking

➔ **Check if BW system is connected to SAP source system and vice versa**

SE16 ‚RSBASIDOC‘ => Field SLOGSYS contains the logical system name of the source system and field RLOGSYS of the BW system.

You should find the same record in both systems.

Connection information is stored in table RSBASIDOC, This table has the assignment of source system to BW.



Some of the important fields are:

- SLOGSYS : Source system (logical system name of source system)
- RLOGSYS : Receiver system (logical system name of BW system)
- OBJSTAT : Object Status
- BIDOCTYP : Basic type
- TSPREFIX : Transfer structure prefix for a source system
- SRCTYPE : Type of the source system

TSPREFIX => It identify the source system with prefix from which DataSource it is getting input.

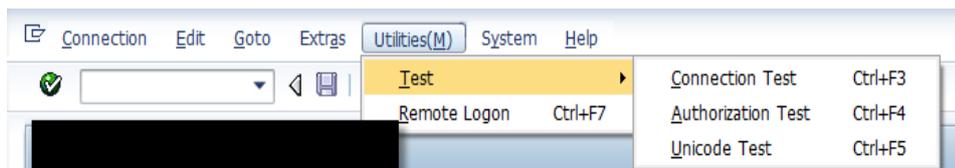
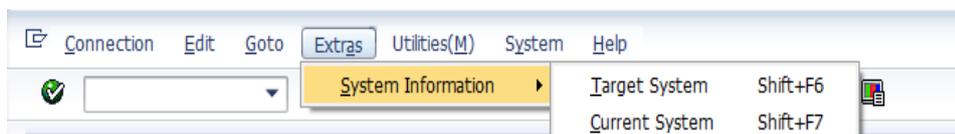
There must be exactly one entry in table RSBASIDOC, which exists in fields SLOGSYS, RLOGSYS, BIDOCTYP, TSPREFIX and SRCTYPES which need to be identical in BW and in the source system.

Manual changes in table RSBASIDOC are not allowed!

→ Check RFC destination in SAP source system

On the SAP source system the RFC-Destination should have same name as the logical system name of the BW system.

SM59 => Double click on the destination => Check the target host: Compare the hostname to the server name of the BW system (SM51) => Check the RFC Logon data: Menupath => Test => Authorization.



In case the maintained user is DIALOG then you can also perform a remote login. Check if user in BW system has the authorization profile: Note 150315

The background user should have following authorizations:

- Human administrator in both systems with 'S_RS_ALL'
- Background user in BW with 'S_BI-WHM_RFC'
- Background user in OLTP with 'S_BI-WX_RFC'

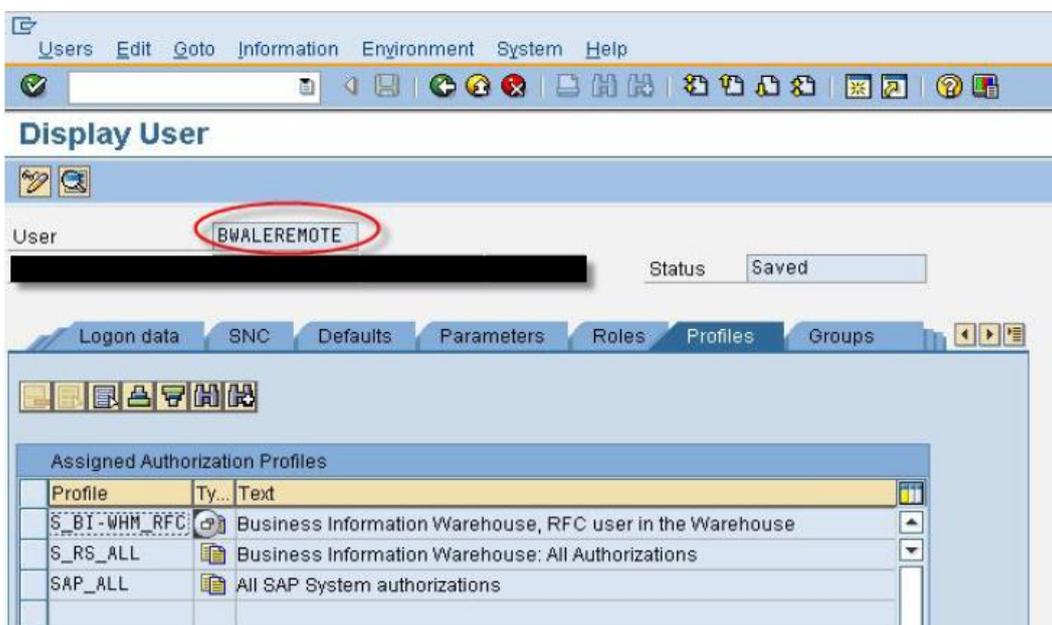
➔ **Check RFC destination in BW system**

On BW system you can get the name of the SAP source system RFC-Destination from table RSLOGSYSDEST or function module RSAR_DESTINATION_GET.

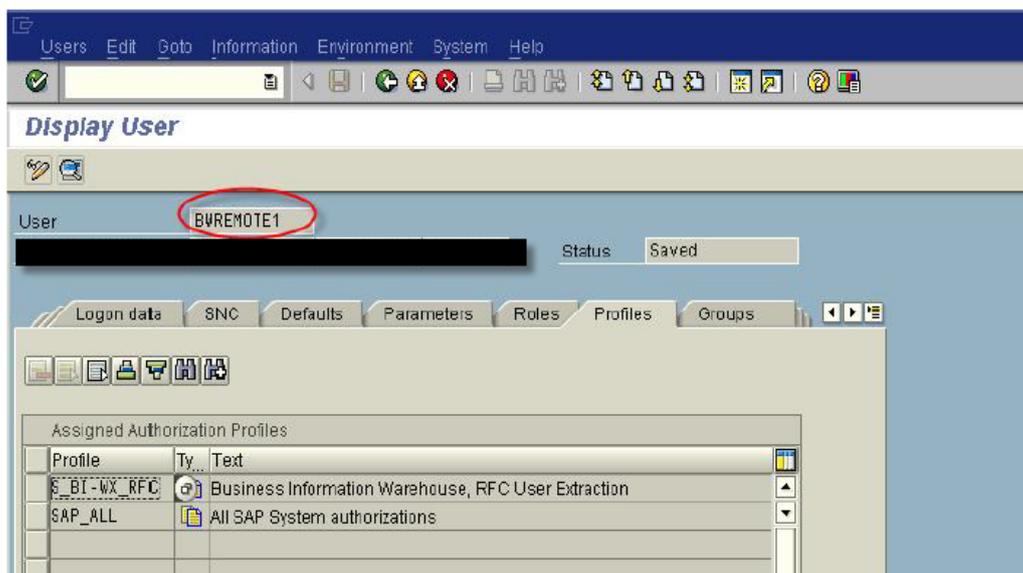
Select SM59 => Menupath => Test => Authorization .

In case the maintained user is DIALOG then you can also perform remote login. Check if the user in the source system has the authorization profile 'S_BI-WX_RFC' (Note 150315)

Background user in BW



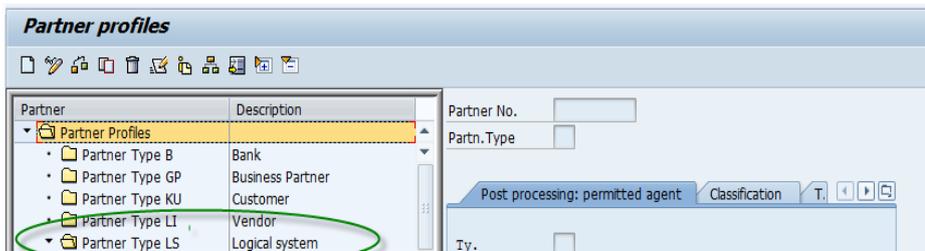
Background user in ECC system



➔ Check Partner Definition

- Outbound message type
- Inbound message type
- Outbound parameter
- Inbound Parameter

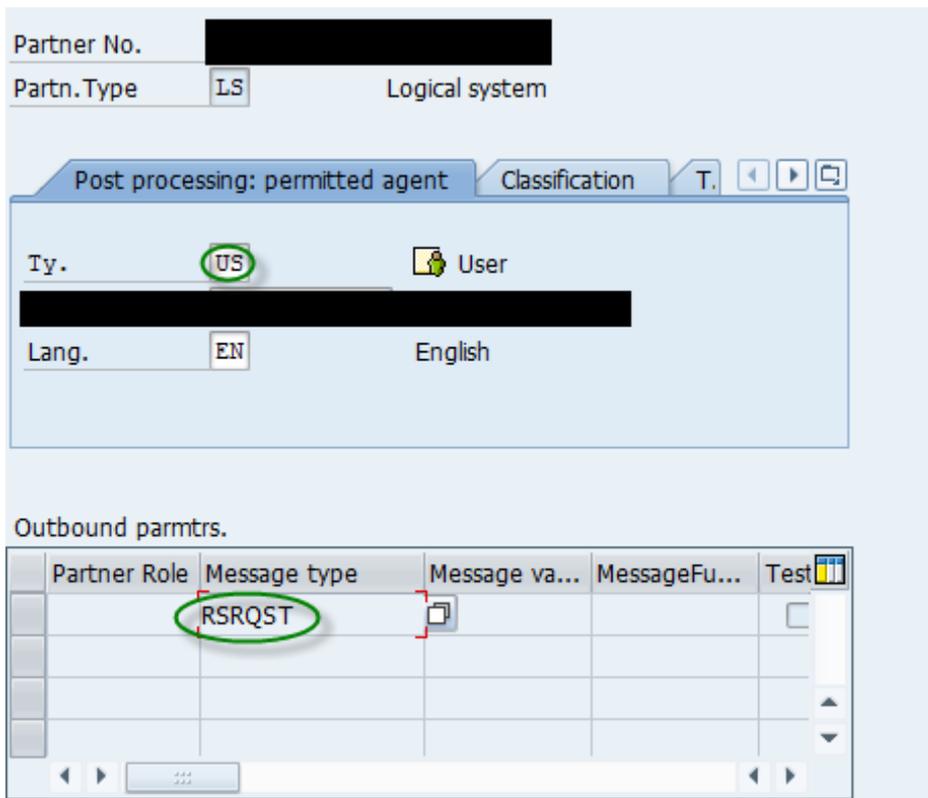
Check the Partner Type LS parameter setting from transaction WE20 in both systems and search the logical system name in Partner Type LS

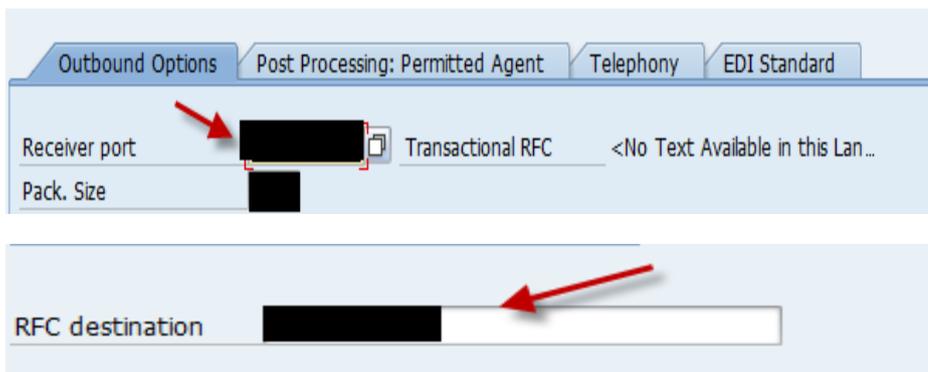


BW system: Search for the logical system name of partner system

Outbound message type

RSRQST 'double click' Receiver port 'double click' RFC destination'
 Make sure that this RFC points to correct source system in sm59





When BW executes for data extraction, the system sends a request IDoc (RSRQST) to the Application Link Enabler (ALE) inbox of the source system. This IDoc contains information such as the

- request ID (REQUEST),
- request date (REQDATE),
- request time (REQTIME),
- Info-Source (ISOURCE),
- update mode (UPDMODE).

Inbound message type

RSINFO

The source system acknowledges the receipt of this IDoc by sending an info IDoc (RSINFO) back to the BW system. The status is 0 if it is OK or 5 for a failure.

RSSSEND

RSSSEND – It will get idoc which contains below,
 Control - Control Parameters
 Data - Data
 Status - Success or Not

Inbound parmtrs.

Partner Role	Message type	Message va...	MessageFu...	Test
	RSINFO			<input type="checkbox"/>
	RSSSEND			<input type="checkbox"/>

Source system: Search for the logical system name of the BW system

Outbound parameter

RSINFO 'double click' receiver port 'double click' RFC destination'
Make sure that this RFC points to the correct BW system in sm59

RSEND 'double click' receiver port 'double click' RFC destination'
Make sure that this RFC points to the correct BW system in sm59

Inbound Parameter

RSRQST

Relevant authorizations for background user

- Background user should have following authorizations:
 - ➔ Human administrator in both systems with 'S_RS_ALL'
 - ➔ Background user in BW with 'S_BI-WHM_RFC'
 - ➔ Background user in OLTP with 'S_BI-WX_RFC'

Error related to IDOC mismatch between source and BW system

"BI unknown in source system".

"BI Idoc type<XXXXXX> is not the same as source system".

In BW and R3 system, Note down the BIDOCTYP field entry in table RSBASIDOC.

Both systems must have same Idoc type.

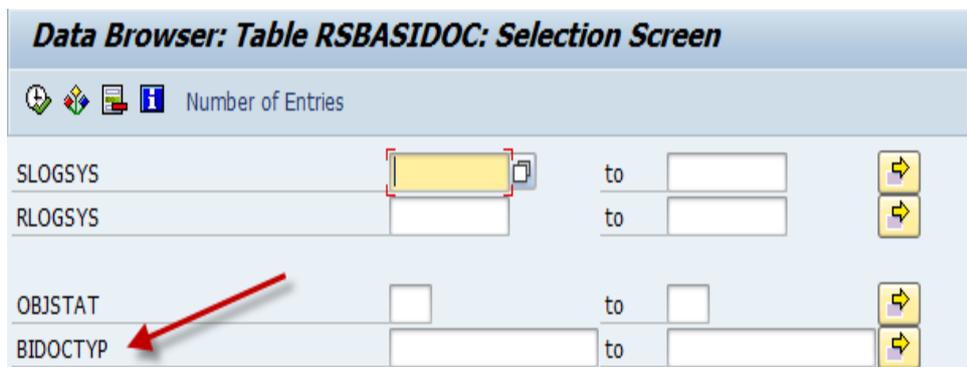
If in source system the connection is not known and if the BIDOCTYP of BW is not used for another connection in the source system OR
If the IDoctype is different due to a system copy

Then try to restore the connection between BW and the relevant source system.

You can do this by restoring Source System:

RESTORE => It copy content from RSBASIDOC to ECC table RSBASIDOC.

- ➔ RSA1 -> Source system <XXX> Select "Restore" from context menu.
- ➔ When you were asked if you want to delete the source system during restore procedure, please select delete option; the source system will be rebuilt after the restore.



How to disconnect all obsolete links to BW

In R3 system execute the function module RSAP_BIW_DISCONNECT to disconnect all obsolete BW links.

Never execute this function module in a BW system!

- Go to Transaction SE37 => function module RSAP_BIW_DISCONNECT => Single Test. Parameter

```
I_BIW_LOGSYS = <RLOGSYS> of RSBASIDOC  
I_OLTP_LOGSYS = <SLOGSYS> of RSBASIDOC  
I_FORCE_DELETE = 'X'.
```

DO NOT enter a value in the "RFC target sys" field. If you do, then it causes the function module to run in the system specified there.

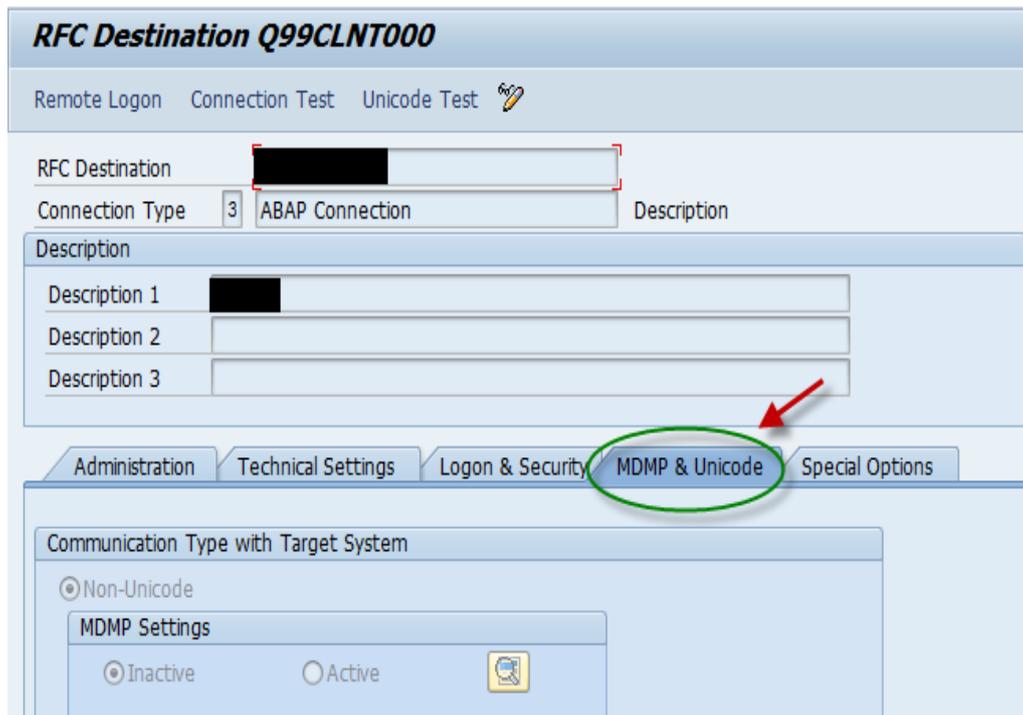
Conditions for the function module:

- RFC connection to RLOGSYS is ok;
Check transaction SM59
- SLOGSYS = logical system name where you execute the function Module

If one source system is not useful then you should not delete it from RSA1, It removes all (Eg. Info package, DataSource, Transfer structure), So you need to follow RSAP_BIW_DISCONNECT in ECC
It will disconnect the link temporarily between BW, so in future you can use it.
If future if you need the source system then you can restore it again.

Unicode settings for RFC connection

In both system ECC or BW, Either it should be Unicode or non-Unicode.
Transaction SM59 => <LOGSYS> => Go to "MDMP & Unicode tab" => Can only be changed or is relevant in a Unicode system.
This setting is irrelevant on the Non-Unicode system.



- Myself connection
Needed for data distribution within a BW System.
Myself connection is created the first time when you call the AWB (RSA1).
From a technical point of view, the mySelf connection is a just a standard source system connection pointing to itself.
Therefore maintenance of target system, client and user is not necessary in transaction sm59. (Note 538052).
- Known issue during transports for export Datasources:
If only client is maintained or
If only user and password maintained but not client.

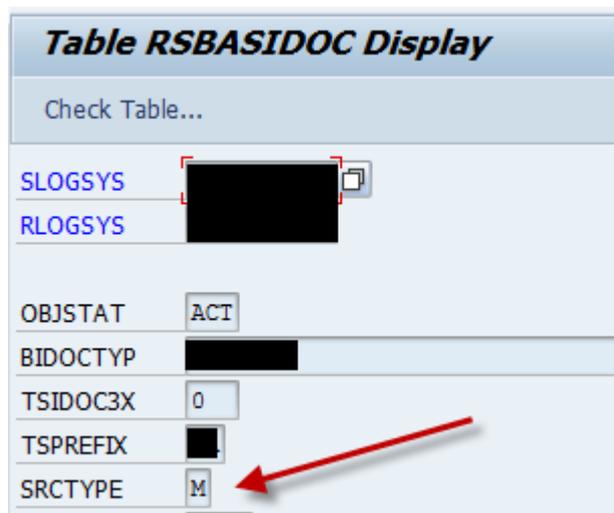
RSA1 Logon issues

When you try to logon to RSA1 you see the error

"Entry in inbound table already exist"

- The "Myself" system is created the first time when you call the AWB (RSA1).
In case of inconsistency the system tries to create entries in the partner profile tables (EDP*) but if there are already entries concerning the partner profile then you will get error such as E0412.
- Before solving the issue concerning the partner profile, check if an entry exists in table RSBASIDOC for the myself connection

SLOGSYS and RLOGSYS = logical system name of BW Source system
SRCTYPE = M



- If there is no entry for the myself connection then myself connection has to be created in debugging because of the usage of right prefix.
Create OSS message.
- In case it is the first time you call RSA1 and no Transfer Structures exist, then you can clean the partner profiles by creating entry manually in transaction WE20 for the logical system name of BW and delete it afterwards.
In that case the system will delete existing entries from table EDP* for myself connection.

Restore or Creation issues

- Sometimes you get message like
'Source system does not exist'(Message no. RSAR175)
→ Follow below procedure to analyze the issue

Check in source system table T000 or transaction scc4 for logical system name.
Check table RSBASIDOC if the connection is using the logical system name.
In order to avoid such errors, please make sure to follow below note, 886102 while doing system copy or renaming systems.
- Error in source system <LOGSYS >
(RSAR502)
→ The main problem, If you get message "RSAR502" or Run time Error "DYNPRO_SEND_IN_BACKGROUND" Means,
System is not open for changes OR
In background not correct authorization profile might be maintained.
- Runtime error means that the OLTP systems wanted to send a DYNPRO but the output did not work because the user (usually called ALEREMOTE) is not a dialog user.
If you want to see the message, you can set the remote user temporarily to dialog user then you can see the message which is send by OLTP system to the BW system.

Source System Deletion and Reconstruction

- In BW system, if you delete a source system from context menu of RSA1 then restore is not possible.
Also all source system dependent objects will be deleted (Eg. Infopackages, Datasources, Transferstructure), those objects will also not be available to create a new connection.
Only possibility in order to avoid manually creation is to create a transport request "SAVE for SYSTEM Copy" in another system and import that request into BW.
Do not forget to maintain RSLOGSYSMAP in the correct way.

SAVE for SYSTEM Copy

We recommend you make this setting when a source system needs to be copied and renamed.

You can avoid having to re-create objects for both SAP systems and BW systems in the following way:

Collect objects dependent on the source system in BW.

Save these to a request.

Export the request.

Delete the objects and rename the source system. Maintain the mapping table so that the old system name Original Source System is changed to the new system as Target Source System.

Import the request, to which you saved the objects dependent on the source system.

- Source system does not know BW
Reason: As there is no entry in RSBASIDOC

E.g. You might executed function module RSAP_BIW_DISCONNECT in the source system.

Restoring via context menu in BW and RSA1 is possible.

System Copy

- Follow below consulting note before doing any system copy or refresh.
 - ➔ 886102 - System Landscape Copy for SAP NetWeaver BW
 - ➔ 1406273 - Consulting: BDLs in BW
- If you still get issue in system copy then please fill questionnaire given in below link and raise OSS message to SAP
 - ➔ <http://wiki.scn.sap.com/wiki/x/5ARaDw>

Tables

- T000
- RSBASIDOC
- RSLOGSYSDEST

Notes

- 886102 System Landscape Copy for SAP NetWeaver BW
- 807895 Incorrect logon data after remote login with SM59
- 184586 System change option and BW
- 150315 BW-Authorizations for Remote-User in BW and OLTP
- 1087980 ECC Source systems appearing in BI folder
- 538052 Maintenance of Myself destination in BW
- 1406273 Consulting: BDLS in BW
- 1097357 7.0 Support Package 16: Transaction BDLS terminates
- 1070378 Correction: Hard-coded source system in DataSource program
- 1059278 70SP15: Error in transaction BDLS
- 1055483 Renaming system in RDA tables (BDLS)
- 1000062 70SP13: Conversion of the logical system name
- 961551 70SP09: BDLS: DTPs are not converted
- 931029 Transformations are not taken into account (BDLS)
- 929045 Correction: PSA user obj not converted in transaction BDLS

OSS Message – General Information required by SAP

- While creating OSS message, please check below points and provide relevant information in message.
Since it will help SAP primary support to have a look at your message ASAP without any process delay.
- System connection requirements
 - ➔ Access to your system ID "XXX", Please make it OPEN

R/3 Support	(Need to be opened)
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You can provide the logon data in remote login secure area.
(Please refer Note - 508140)

 - ➔ Please provide sufficient authorization.
 - ➔ Provide step by step procedure to replicate the issue in attachment of the message with technical name of the objects involved.
 - ➔ Provide the system details as below
 - Client : XXX
 - System ID : XXX
 - User : XXX
 - PWD : Secure area
 - ➔ Make sure that the password is updated ONLY in Secure area.
- Others useful points
 - ➔ Log OSS message in RIGHT component
E.g. BW-WHM-DST-SRC
 - ➔ Update your Name and Direct Contact number in OSS message. It will reduce message process delay.

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